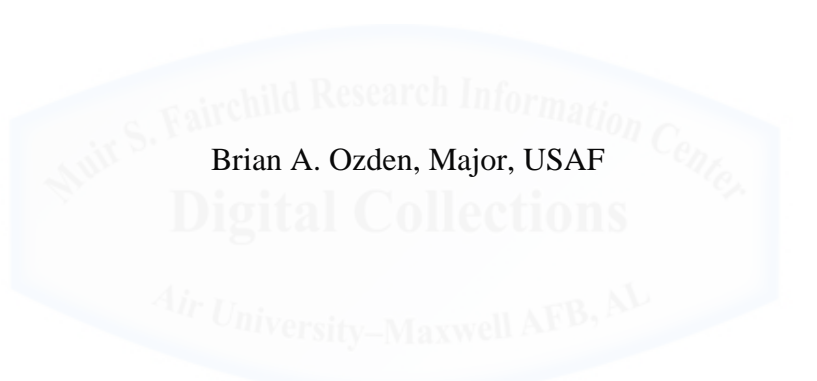


AU/ACSC/2016

AIR COMMAND AND STAFF COLLEGE

AIR UNIVERSITY

TOMORROW'S HANDGUN:
ENSURING THE RIGHT GUN FOR ALL MILITARY LAW ENFORCEMENT
OFFICERS



Brian A. Ozden, Major, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

Advisor: Dr. Paul Moscarelli

Advisor: Dr. Gregory F. Intoccia

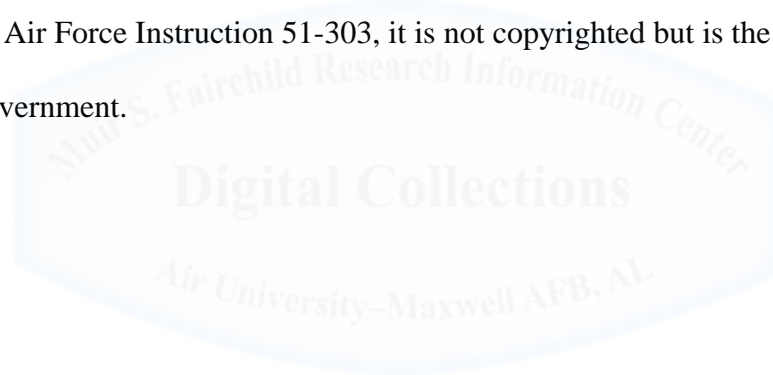
Maxwell Air Force Base, Alabama

February 2016

DISTRIBUTION A. Approved for public release: distribution unlimited.

Disclaimer

The views expressed in this academic research paper are those of the author. They do not reflect the official policy or position of the United States government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted but is the property of the United States government.



Acknowledgement

I offer my sincere thank you to Dr. Paul Moscarelli and Dr. Gregory Intoccia, my academic advisors. Dr. Moscarelli, for your assisted in helping me focus my topic into something manageable and relevant. Dr. Intoccia, for your constructive criticism and academic support which allowed me to maintain focus and complete this rigorous and rewarding process.

I would also like to thank Brent Daniels who, as both a military and Federal Law Enforcement Officer, provided a unique perspective along with excellent research tips related to both the M9 and Glock handguns.

Thank you to my fellow classmates and colleagues who reviewed my drafts each week and provided excellent feedback and recommendations. To Kathleen Thompkins, whose editorial assistance has been invaluable throughout my ACSC career, I thank you.

Finally, I would like to express my sincere appreciation to my wife, and our children, for their unwavering support and encouragement to complete this research. Without them, this would not have been possible.

TABLE OF CONTENTS

Disclaimer	ii
Acknowledgement	iii
TABLE OF CONTENTS.....	iv
LIST OF FIGURES	v
ABSTRACT.....	vi
INTRODUCTION	1
Research Methodology.....	3
BACKGROUND	4
Original M9 Procurement.....	5
Center for Naval Analysis Survey.....	6
COMBAT VERSUS LAW ENFORCEMENT HANDGUN REQUIREMENTS	10
The Universal Handgun	11
Training Requirements for Law Enforcement Versus Combat.....	13
Military and Civilian Law Enforcement Issues to Consider	18
North Atlantic Treaty Organization 4090.....	18
Hague Conventions (1899 and 1907)	19
Posse Comitatus Act.....	20
EVALUATION CRITERIA FOR A MILITARY LAW ENFORCEMENT HANDGUN	22
Review of FBI RFP-OSCU-DSU1503.....	23
COMPARING THE CRITERIA AGAINST GLOCK HANDGUNS.....	25
GLOCK 17 9mm Versus Military Law Enforcement Criteria.....	26
GLOCK 21 .45 Auto Versus Military Law Enforcement Criteria.....	27
GLOCK 22 40 Caliber Versus Military Law Enforcement Criteria	28
FINDINGS AND RECOMMENDATIONS.....	28
CONCLUSION.....	30
NOTES.....	32
BIBLIOGRAPHY.....	38

LIST OF FIGURES

Figure 1 Beretta M9 9mm.....	5
Figure 2, Overall Weapon Satisfaction Percentages.....	7
Figure 3 Weapon Handling, Dissatisfaction Percentages	8
Figure 4 Soldier's Confidence Level in the M9.....	8
Figure 5 E-Type Silhouette Target (25 meters with no rings).....	14
Figure 6 QIT Target.....	15
Figure 7 Zone C and Figure 7A Zone D.....	17
Figure 8 GLOCK 17 9mm	26
Figure 9 GLOCK 21 .45 ACP.....	27
Figure 10 GLOCK 22 40 caliber	28



ABSTRACT

Almost three decades ago, the U.S. Military selected the Beretta M9 as the standard issue handgun for all Soldiers, Sailors, and Airmen. This handgun was designed to meet the needs of all service members despite the differences in the handgun needs of various job functions. The purpose of this paper is to ensure the M9 replacement takes into consideration the specific handgun needs of the military law enforcement community. It will employ the evaluation methodology to determine if any of the three most popular commercially available GLOCK handguns, the 17, 21, and 22, already used by a majority of civilian law enforcement officers, would be the best choice for this subset of the military population.

Its key findings demonstrate greater similarities exist between military and civilian law enforcement than those of military law enforcement and other military job functions when it comes to handgun training, use, and physical characteristics. This paper's key recommendation is that the military should follow the lead of the civilian law enforcement community when selecting a handgun. Furthermore, this paper demonstrates how issues such as ballistics, international treaties, and domestic laws would not inhibit the U.S. military's selection of a commercially available GLOCK handgun. Finally, criteria will be measured, against these three popular GLOCK handguns, demonstrating why they might be a viable option in the U.S. military's handgun purchasing strategy.

INTRODUCTION

The first existence of a handgun traces back to around 1364.¹ While the concept has not changed much in the centuries that have followed, the technology designed to propel a projectile through the air, at a penetrating rate of speed, certainly has. There are currently thousands of handgun makes and models designed to meet today's myriad of needs.

Just like these many handguns, there are also numerous career fields which require them as a part of their standard issue. One of these career fields, the military, is made up of several diverse job categories where the reason to carry a handgun may vary. For enlisted personnel alone, the Bureau of Labor Statistics (BLS) identifies fourteen unique job categories including administrative, combat, healthcare, and protective service among several others.² However, regardless of the job category, all members of the military are required to demonstrate at least a basic familiarity with a handgun.³

Protective service is one of the aforementioned career categories made up primarily of military law enforcement officers including the Army Military Police, Navy Master-at-Arms, and Air Force Security Forces Officers. Standard issue, following training of these Soldiers, Sailors, and Airmen, is the venerable Beretta M9 handgun. Unfortunately, many in the military law enforcement community deem the M9 inadequate. This is evident by specialized units, such as the U.S. Army Criminal Investigation Division (CID), Air Force Office of Special Investigations (AFOSI), and the Naval Criminal Investigation Services (NCIS), departing from the M9 and opting to carry a different weapon.⁴ These agencies currently utilize the M11, which is deemed more suitable for law enforcement purposes. While this provides a solution for these specialized units, the greater military law enforcement community continues to use the M9.

Currently, the Army Contracting Command is soliciting bids, from handgun manufacturers, to compete for the selection of the next generation handgun for all military members across every branch of service and job function, including protective services.⁵ However, like the competition leading to the M9, this new handgun is going to be a single design, built primarily to meet the needs of a military member in a combat scenario regardless of their specific job category. The winner of the competition is set to receive a projected half billion-dollar contract to supply hundreds of thousands of this new handgun, currently identified as the Modular Handgun System (MHS).⁶

Similar to the MHS selection competition, civilian law enforcement agencies have conducted numerous handgun tests through the years. The results of such tests have led civilian law enforcement agencies, in the United States, to select commercially available GLOCK handguns over others more than 65 percent of the time.⁷

Based on their popularity, among civilian law enforcement officers in this country, how can the U.S. military determine if an existing GLOCK handgun is a more viable option for its own law enforcement community than the winner of MHS competition?

A comprehensive study of the handgun needs of military law enforcement will demonstrate that military and civilian law enforcement officers share more similarities in their handgun needs than those that exist between military law enforcement and other military job categories. These similarities will provide the justification necessary to produce an evaluation criterion by which to discern that a GLOCK handgun, already proven suitable by civilian law enforcement, is a viable option for military law enforcement.

Specifically, a review of various handgun qualification courses will demonstrate the similarities that exist between military and civilian law enforcement. This review will also identify the differences in the qualification courses of military and civilian law enforcement compared to the courses used by other military job functions. The identified features will then become part of the justification for development of a specific handgun evaluation criteria just for military law enforcement.

Additionally, factors such as ballistic characteristics, increased integration of military law enforcement with civilian law enforcement, and the type of incidents involving handguns demand that military law enforcement professionals receive the right handgun. Therefore, this paper maintains that a commercially available GLOCK 17, 21, or 22 handgun, already proven effective by law enforcement officer and agencies in the civilian domain, would better serve the military law enforcement community than the MHS competition winner. Regardless of the model selected, a GLOCK handgun will provide military law enforcement with the same effective technology as their civilian counterparts.

Research Methodology

This paper will employ the evaluation methodology to develop criteria by which to determine if a popular GLOCK handgun is measurable against the unique military law enforcement requirements. To develop these criteria, the research will first analyze the training requirements of military law enforcement and compare them against other military job categories while engaged in combat. The research will continue by comparing these training requirements to that of civilian law enforcement and determine where those similarities and differences exist. Additionally this paper will review other factors effecting military law enforcement. These

factors include ballistics, international agreements, and the Posse Comitatus Act. By reviewing these additional factors, justification for an evaluation criterion will be established.

Once examined, the research will determine if a separate handgun competition is required or even necessary to select a handgun adequate for military law enforcement personnel. By reviewing a list of currently accepted criteria, used by civilian law enforcement agencies, the evaluation framework will develop its own list of selection criteria for a handgun suitable to meet the specific needs of the military law enforcement community. The criteria will serve as the baseline by which to compare the three most popular GLOCK handguns, the model 17, 21, and 22, to see if any or all could replace the Berretta M9.

BACKGROUND

According to a 2013 Pew Research Center study, the most common reasons why handguns are purchased include personal protection, sporting, hunting, collecting, and second Amendment rights.⁸ For each of these reasons, gun manufacturers carefully design and deliver products to meet the needs of their potential owners.

Additionally, many professionals require handguns as a part of their standard issue including such jobs as the profession of arms (military), law enforcement, and security among others. These fields make up some of the largest populations of gun owners, in the United States, and handgun manufacturers support them with specifically designed weapons to fulfill their unique needs. In many cases, organizations either provide or suggest the handgun these professionals may utilize. For example, since 1989, the Beretta M9 9 millimeter (mm) handgun has been the standard issue handgun for a majority of all military members.⁹ Likewise, two of the premier civilian law enforcement agencies, the Federal Bureau of Investigation (FBI) and the

Bureau of Alcohol, Tobacco, Firearms and Explosives (BATFE), have been issuing their Special Agents the .40 caliber GLOCK 22 since 1997 and 2010 respectively.¹⁰ These handgun selections came only after exhaustive testing was done based on the perceived needs of their respective organizations.

The Beretta M9 9mm (Figure 1) has a barrel length of approximately 4.9 inches and a height of 5.5 inches.¹¹ With an initial trigger pull of eleven pounds followed by a six-pound single action pull, the M9 also incorporates an external safety and a price of approximately \$725.¹² While similar, these specifications include notable differences from the GLOCK 17, 21, and 22 handguns commonly used by civilian law enforcement.



Figure 1 Beretta M9 9mm

Original M9 Procurement

The Beretta M9 is an aged weapon system originally designed to meet the requirements of the Hague Conventions (1899 and 1907) along with North Atlantic Treaty Organization's (NATO) Standardization Agreement (STANAG) 4090.¹³ After a lengthy and controversial competition, the military selected the Beretta M9 9mm as its primary small arms combat handgun for standard use by all U.S. Army, Navy, and Air Force members.¹⁴

The 9mm M9 handgun is essentially a Beretta 92F made to meet military specifications.¹⁵ These specifications include locked breech, semi-automatic, and recoil-operation, along with a 15-round staggered row magazine.¹⁶ This ambidextrous designed handgun replaced the .45 caliber M1911, which had been in service since its selection in 1911.¹⁷ The M1911 was slated for replacement primarily because of the move to the smaller 9mm ammunition round.¹⁸

The decision for Beretta to be the producer of the M9 handgun took a number of years to materialize due to a variety of controversies and allegations surrounding the selection competition.¹⁹ While the Government Accounting Office cleared the entire allegation and allowed the selection to stand, the Beretta M9 entered service under a cloud of uncertainty including those involving the safety and dependability of the weapon.²⁰

Originally awarded a five-year contract, Beretta delivered 315,930 handguns, worth over \$75 million dollars, to the U.S. military.²¹ Additionally, the contract dictated that the Italian company begin producing the M9 in the United States within two years.²² To date, Beretta has delivered more than a half million M9 handguns to all branches of the military.²³

Center for Naval Analysis Survey

Despite the variety of issues related to the initial contract, the M9 remains in service after more than 25 years. However, due to a number of complaints related to all service weapons, raised by soldiers during Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), the U.S. Army commissioned the Center for Naval Analysis (CNA) to conduct research aimed at identifying current and future weapon needs.²⁴ The study consisted of over 2600 survey participants designed to identify the soldiers' perspective on both the reliability and durability of various weapons used in combat, including the M9.²⁵ Of the four combat weapons

surveyed, the M9 scored the lowest. This fact became a key component leading to the decision to begin the procurement process for a replacement handgun.²⁶

Overall, only 58 percent of the survey respondents, issued an M9, reported being satisfied

	% Satisfied				Total all weapons
	M9	M4	M16	M249	
Weapon overall	58	89	75	71	78
Ammunition	52	79	79	72	77
Handling	64	90	60	60	71
Accuracy	76	94	89	87	90
Range	66	92	88	89	88
Rate of fire	88	93	88	94	91
Training	71	85	82	77	82
Maintainability	81	87	82	70	82
Cleaning equipment	70	75	68	63	70
Corrosion resistance	75	80	70	65	73
Accessories	52	86	75	71	77

Figure 2, Overall Weapon Satisfaction Percentages

with the handgun. This was the lowest among issued weapons. The level of satisfaction by percentage, for each weapon system, was further broken down into sub-categories (Figure 2).²⁷

One of the sub-categories, weapon handling, was deemed critical and further broken down into reasons of dissatisfaction (Figure 3).²⁸ Of this breakdown, size and weight scored among the highest levels of weapon handling dissatisfaction.²⁹

Additionally, the M9 had the lowest level of soldier confidence among combat weapons. Only 54 percent of respondents reported being confident in the M9.³⁰ The most common cause

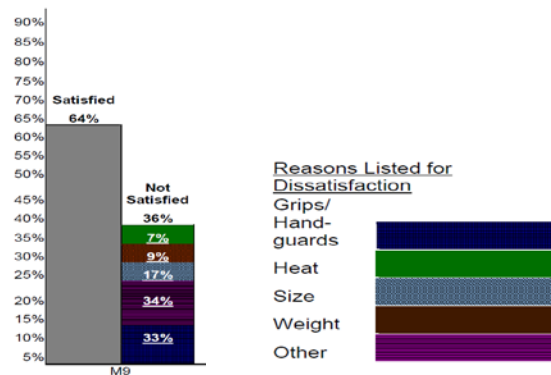


Figure 3 Weapon Handling, Dissatisfaction percentages

for this lack of confidence was the soldier's inability to maintain the weapon correctly.³¹ A number of common reasons for confidence and lack of confidence in the M9 handgun was also reported (Figure 4) by survey participants.³²

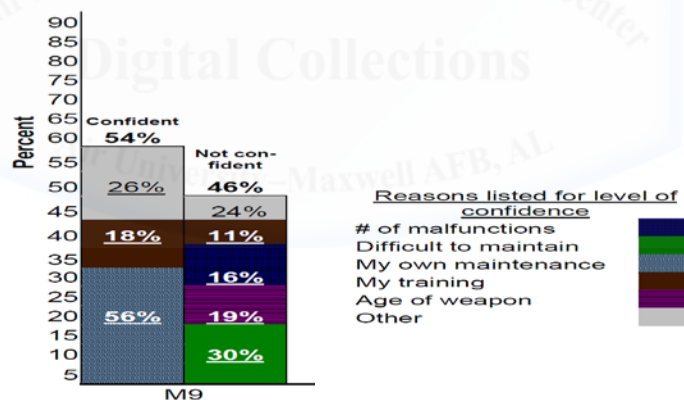


Figure 4 Soldier's Confidence Level in the M9

Finally, most disturbing of all the statistics was that over 26 percent of respondents reported they experienced some sort of stoppage of the M9 during an in theater engagement.³³ For these reasons and more, the military has begun the process of procuring a new handgun to replace the M9. Despite heavy criticism from vendors and members of congress for the lengthy delay, the Modular Handgun System (MHS) competition is set to begin in 2016 according to Request for Proposal (RFP) W15QKN-15-R-0002 released during the summer of 2015.

Modular Handgun System (MHS) Competition

The MHS competition has been in the works for nearly a decade, but began taking real form after 2013.³⁴ Designed to be a complete system change, the MHS competition will look to replace not only the M9, but potentially bring a more potent ammunition round to military members.³⁵ The open competition will provide interested vendors the opportunity to compete for an Indefinite Delivery, Indefinite Quantity (IDIQ) Firm-Fixed Price (FFP) contract to award the U.S. military with hundreds of thousands of new handguns, ammunition, and accessories.³⁶ The MHS competition will evaluate potential M9 replacements based upon six different criteria including system accuracy, reliability and service life, license rights ammunition, license rights handgun and accessories, other characteristics, and price.³⁷

The MHS competition has not been without its share of controversy, even before the selection process has begun. One staunch opponent of the U.S. Army's attempt to purchase a new handgun has been Senator John McCain, Chairman of the Senate Armed Services Committee.³⁸ Senator McCain's office has argued that the process has become far too cumbersome and will ultimately add \$50 or more to the cost of each handgun, leading to \$15 million wasted on paperwork and bureaucracy.³⁹ Additionally, McCain's office suggests the RFP itself makes it virtually impossible for the U.S. Army to make a selection at all.⁴⁰

Most important is that the MHS competition, like the M9 procurement process before it, fails to differentiate between the unique needs of different military job functions. The MHS seeks to select one universal handgun for utilization by all service members. Like the M9, the MHS will be a weapon designed for utilization in combat by all job categories and not the unique needs of any one-job function, particularly those of military law enforcement while in performance of their non-combat duties.

COMBAT VERSUS LAW ENFORCEMENT HANDGUN REQUIREMENTS

As of May 2015, the Bureau of Labor Statistics (BLS) estimated there were approximately 1,341,049 active duty members of the United States military.⁴¹ The BLS further estimates this number includes approximately 81,000 of those members engaged in the field of protective services, which includes primarily what would be considered as traditional law enforcement personnel.⁴² These services include enforcing military laws and regulations and providing emergency responses to disasters. More specifically, military law enforcement responsibilities includes controlling traffic, preventing crime, responding to emergencies, investigating crimes committed on military property and guarding inmates in military correctional facilities.⁴³ These functions are virtually identical to the job functions of their civilian law enforcement counterparts. Therefore, after subtracting one percent for fire and rescue services, military law enforcement makes up approximately five percent of the active duty military population.

In addition to these forces, there are approximately one million members of the United States Ready Reserves, which includes deployable Soldiers, Sailors, and Airmen in both the Reserves and National Guard.⁴⁴ Using the same labor percentages as active duty, this would represent another 50,000 reserve military law enforcement members.

By comparison, the New York City Police Department, which maintains the largest civilian police force in the United States, has over 36,000 sworn officers.⁴⁵ Additionally, the largest Federal Law Enforcement agencies include the Customs and Border Patrol with approximately 36,000 officers, the Bureau of Prisons with approximately 16,000 prison guards, and the Federal Bureau of Investigation with approximately 12,500 Special Agents.⁴⁶

Therefore, even without the inclusion of Reserve forces, the U.S. military is by far the largest law enforcement agency in the United States. However, civilian law enforcement agencies test and select a weapon designed specifically for their law enforcement needs. In contrast, since military law enforcement makes up only a small percentage of the overall military, their handgun needs are combined with those of other job functions.

The Universal Handgun

There are hundreds of makes and models of handguns available in the United States. While many handguns are manufactured for general utility, several are specially designed to meet specific end user requirements. While some handguns are made for target shooting, others are made for protection, collection, or hunting.

For example, the International Defense Pistol Association (IDPA) took a survey, during their 2013 U.S. National shooting competition, and found that while GLOCK was a common choice, the Springfield XD was the most popular handgun for competitors in the enhanced service pistol division.⁴⁷ Likewise, for personal protection at home, a GLOCK may not be an acceptable choice for families with small children. The GLOCK lacks an external safety button and may be more susceptible to unintentional discharges. However, as a law enforcement weapon, GLOCK is the predominate choice throughout the United States.⁴⁸

Is there a universal handgun that would work best across all military job functions? This logic was assumed with the 1989 selection of the M9 and the answer, over 25 years later, is arguably no. We see this argument made exceptionally clear by reviewing the number of specialty units that have moved away from the M9 in favor of handguns more specific to their mission sets. This is particularly true in the area of military law enforcement.

Most specialized law enforcement organizations in the military, including the U.S. Army Criminal Investigation Division (CID), Air Force Office of Special Investigations (AFOSI), and the Naval Criminal Investigation Services (NCIS), departed from the M9 and began carrying their own weapons, in most cases, the M11.⁴⁹ Due to the size of the M9, the M11 was almost immediately integrated into the arsenal of these specialized law enforcement agencies who needed a more “compact” and “concealable” handgun. The Naval Investigative Service (later changed to NCIS) was the first to adopt the M11, which is essentially a military version of the 9mm Sig P-226.⁵⁰ The handgun was given the name M11 following its integration into both the Army and Air Force specialized investigative units in the mid-1990s.⁵¹

This shift from the norm is not unique to specialized military law enforcement members. Specialized combat soldiers, including Navy SEALs, Marine Corp Special Operations and Air Force Special Operations forces, have also diverted from the standard issued M9 handgun.⁵² While each of these elite units utilizes a variety of handguns, the M11 has been the predominant weapon of choice until recent years. Currently, all three are considering or have recently begun using a commercially available GLOCK in certain operational capacities.⁵³

However, this still leaves tens of thousands of Military Police, Master-at-Arms, and Security Forces Officers who conduct routine law enforcement and security services throughout the military using the wrong weapon, the M9. These professionals are utilizing a handgun deemed inadequate by other more specialized units who, fortunately for them, had the ability to conduct procurement outside of the normal standard issue.

Training Requirements for Law Enforcement Versus Combat

One way to determine the handgun needs of a law enforcement officer is to compare training requirements, both military and civilian, to that of other jobs. However, with the exception of military law enforcement, most other military job categories do not have their own handgun qualification courses. Rather, these job functions qualify with a handgun by using a qualification course designed to establish their competency while engaged in a combat environment. This environment is markedly different from that of law enforcement and thus requires different qualification courses. To demonstrate this difference, one cannot look solely at the qualification courses of the military. One must review the courses of civilian law enforcement agencies. Examining multiple qualification courses, to include military police officers, Special Agents of the Federal Bureau of Investigation (FBI) and law enforcement officers in the State of Wisconsin, and then comparing them to the general combat qualification courses, will enhance the differences of the handgun needs of law enforcement officers and other military job functions while in combat.

The Army Combat Pistol Qualification Course (CPQC), the primary course utilized to test the proficiency of soldiers deployed in combat, consists of a thirty-target course of fire in which multiple magazine changes are required.⁵⁴ The CPQC requires the combat soldier to engage both single and multiple popup targets in timed intervals. The targets' distance varies from 10 to 31 meters.⁵⁵ The emphasis of the course focuses on using the fundamentals of quick fire.⁵⁶ The course uses a standard E-type silhouette target, without rings, measuring approximately 40in x 19.5in (Figure 5).⁵⁷ A round that penetrates the silhouette is a hit and counted towards the overall score. In order to qualify on the CPQC, the shooter must record 16

penetrating hits into the target out of 30 rounds.⁵⁸ Failure to get a round off during the course of fire results in a miss.



Figure 5 E-Type Silhouette Target (25 meters with no rings)

An additional qualification course, utilized by soldiers deployed in combat, is the Alternate Pistol Qualification Course (APQC). Like the CPQC, the APQC focuses on rapid firing techniques. The primary difference in the two courses is the APQC requires all shots to be at a target measuring 25 meters away from the shooter.⁵⁹ The course also utilizes the E-type silhouette target requiring a minimum of 23 out of 40 rounds to penetrate the scoring area in order for the shooter to qualify. In both the CPQC and the APQC, the handgun remains in the raised position while not engaged.⁶⁰

In both the CPQC and the APQC, the external safety should be engaged when not firing the weapon and upon reload.⁶¹ Additionally, at no time does the test require one handed shooting or drawing from concealment during the course of fire.⁶²

In addition to these two courses, the Army has another course required solely for Military Police officers to qualify with a handgun. This course of fire, called the Military Police Handguns Qualification Course (MPFQC), more closely resembles that of the civilian law enforcement community. The MPFQC requires the shooter start 35 meters away from the target and move forward to the seven-meter line to complete the course.⁶³ The course of fire uses 50 rounds and begins with precision shooting, in both the prone and kneeling positions, in which time is not a factor.⁶⁴ The course ends with one handed shooting for time and requires concealment and drawing from a holster.⁶⁵ To qualify on the MPFQC, the shooter must record 35 of 50 penetrating shots.⁶⁶

Now compare these courses with those of civilian law enforcement agencies. In 2012, the FBI moved to a new qualification course, replacing a decade old course to place more emphasis on close quarter shooting.⁶⁷ The move came after the FBI analyzed over 200 Agent involved shootings covering a seventeen-year period.⁶⁸ It was determined that most shooting

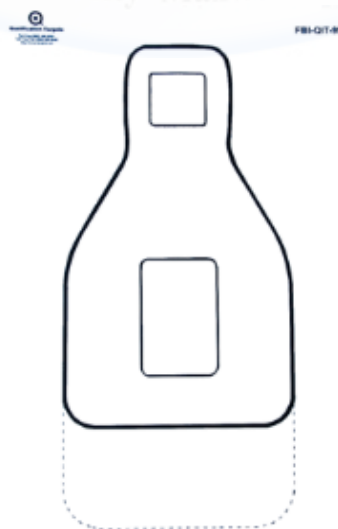


Figure 6 QIT Target

incidents occurred within three yards of a subject.⁶⁹ This led to the FBI's determination that law enforcement officers needed more training, which would enable them to engage a target with

three or four rounds within a distance of zero to three yards.⁷⁰ The FBI's new course, like the one it replaced, requires an 80 percent hit rate inside the qualification target (QIT) (Figure 6.)⁷¹ However, the old course consisted of 50 rounds where the new course uses 60.⁷² In the old course, over 50 percent of the rounds fired were between 15 and 25 yards. With the new course, 40 of the 60 rounds shot are within seven yards of the target.⁷³ The new FBI pistol qualification course begins with a shooter at three yards away from the target followed by seven yards away.⁷⁴ At both yardages, the shooter fires a series of timed intervals from close range. Two points of emphasis become evident during this qualification course. One handed shooting is required, as well as a transition from one hand to another during the course of fire. Additionally, during the FBI's qualification course, the shooter is required to draw and fire from a holster, while a jacket, vest, or other covering garment conceals the handgun.⁷⁵

Like the FBI, the state of Wisconsin has a handgun qualification course designed to establish a uniform minimum standard for handgun proficiency for Wisconsin law enforcement officers and academy students.⁷⁶ The Wisconsin qualification starts with the shooter standing three yards from the target and moving backwards throughout the course of fire.⁷⁷

The final stage of the Wisconsin qualification course is from a distance of 25 yards.⁷⁸

Other important aspects of the Wisconsin qualification course are that scoring is based on time, includes a reload, and shooting begins from the holster and includes a draw. Also, the course incorporates the use of a dummy round in order for the shooter to demonstrate the ability to overcome a weapon malfunction.⁷⁹ The course uses two zoned targets to calculate scoring. The shooter must hit 28 out of 32 rounds in zone C (Figure 7) during close range shooting and 10 hits out of 12 rounds in zone D (Figure 7A) in 25 yard shooting.⁸⁰



Figure 7 Zone C and Figure 7A Zone D

The state of Wisconsin also identifies several critical pass or fail rules for law enforcement officers involving the proper use of the holster.⁸¹ These rules include proper draw from a holster, which requires the shooter not to sweep his reaction hand, self, or others during the draw.⁸² Additionally, the shooter must demonstrate a one handed re-holster.⁸³

This comparison demonstrates several significant differences between the law enforcement and combat requirements in a handgun. The Army's combat courses focus on rapid fire at multiple targets, typically at distances of approximately 25 yards. In addition, the combat course target acquisition begins from a position outside of the holster. Finally, to receive a passing score, on either the combat or alternate combat course, the shooter must score a "hit" rate of approximately 55 percent.

In comparison, the military and civilian law enforcement qualification courses focus on shooting primarily at closer range targets, many between three and seven yards. While also

timed, there is a greater emphasis on accuracy in the law enforcement qualification courses, including that of the military police course, where shooters must score hit rates in the range of 70-90 percent. Additionally, unlike the combat course, both the military and civilian law enforcement courses focus on being able to draw from a holstered position with the handgun safety in the off position (or with a handgun that does not contain an external safety).

Military and Civilian Law Enforcement Issues to Consider

There are several treaties, laws, and protocols that exist for the military which are non-existent or different for civilian law enforcement. These differences could restrict the military or military law enforcement community from utilizing a specific handgun. These issues must be carefully considered before any handgun selection can be made.

North Atlantic Treaty Organization 4090

One of these differences is the U.S. military's decision and requirement to adhere to North Atlantic Treaty Organization (NATO) Standard Agreement (STANAG) 4090, which dictates the characteristics of the 9mm small arms cartridge used in semi-automatic weapons.⁸⁴ This round, known as the "9 mm NATO", is essentially an overpressure variant of the 9×19mm Parabellum.⁸⁵

In the Department of Justice's most comprehensive Law Enforcement Management and Administrative Statistics study, released in 2004, the 9mm was the most common caliber of handgun used by departments with more than 100 officers.⁸⁶ Despite the widespread misconception that a .40 or .45 caliber round is most common among law enforcement, the reality is that over 75 percent of survey respondents utilize a 9mm just like the military.⁸⁷

Hague Conventions (1899 and 1907)

The NATO standard does not specify the type of bullet (ball, expanding, incendiary, etc.) the military is required to use. Instead, Declaration III of the Hague Convention of 1899 prohibits the use of expanding ammunition in warfare.⁸⁸ This prohibition was ratified a second time in 1907 and for this reason, the U.S. military has traditionally utilized the 9 mm NATO Full Metal Jacket (FMJ), "ball" ammunition.⁸⁹

The ammunition type then becomes a major difference between military and civilian law enforcement. This difference is not in the area of size, as many believe, but in the characteristic of the bullet upon impact. Most civilian law enforcement agencies utilize expanding ammunition designed to mushroom out, when a target is struck, instead of penetrating through a target like that of ball ammunition.⁹⁰ The use of expanding ammunition reduces the risk of a bullet passing through a target and striking another individual, thus minimizing civilian injury.⁹¹ Additionally, this type of bullet is more likely to cause a catastrophic injury to the human body.⁹² The expanding and fragmenting bullets seek to flatten or break apart on contact, making them more likely to remain inside the body of a target and therefore transfer all of their energy into it.⁹³ The result of this is a larger amount of tissue damage or destruction.⁹⁴ Compare this to the FMJ, designed to penetrate and injure a soldier in combat, rendering him in need of medical care, thus removing two individuals from the fight.⁹⁵ In law enforcement, the logic of FMJ ammunition proved to be ineffective during the Miami shootout between armed bank robbers and FBI Special Agents.⁹⁶ Despite having been shot several times, the involved bank robbers were able to continue to fire their weapons at the FBI Agents.⁹⁷ This led to the death of multiple Agents and the recognition that had law enforcement utilized expanding ammunition; the initial wounds to

the bank robbers likely would have been fatal, thus saving the lives of the law enforcement personnel.⁹⁸

Technically, the United States never actually signed The Hague Convention treaty but has traditionally adhered to the terms of the agreement.⁹⁹ However, the treaty only covers the rules of international war, involving covered countries, and is not applicable to domestic law enforcement.¹⁰⁰ In May 2010, the Army's provost marshal approved the use of expanding ammunition for military law enforcement officers on Army installations.¹⁰¹ This decision came after two active shooter incidents, one at Fort Hood and one at the Pentagon, where an armed gunman opened fire on military and civilian personnel.¹⁰² While specialized military police units, such as AFOSI, Army CID, and NCIS, have been utilizing hollow point ammunition for some time, even after the 2010 decision, most military law enforcement officers do not utilize this type of ammunition.

Posse Comitatus Act

Title 18, U.S. Code Section 1385, known as The Posse Comitatus Act, was designed to end the use of military troops to police state elections.¹⁰³ While this rationale is no longer needed, the law is still often misunderstood as preventing the military from engaging in domestic law enforcement activities. While the military customarily refrains from engaging in domestic law enforcement where they have no jurisdiction, there are specific exemptions to the Posse Comitatus Act which allows military and civilian law enforcement officers to work together for a common purpose.

Some of these exceptions include:

- National Guard forces, including military police, operating under the State authority of Title 32 during time of crisis or national disaster are exempt from the Posse Comitatus Act.¹⁰⁴
- Pursuant to the presidential power to quell domestic violence, federal troops are expressly exempt from the prohibitions of Posse Comitatus Act, and this exemption applies equally to active-duty military and federalized National Guard troops.¹⁰⁵
- Congress created a “drug exception” to the Posse Comitatus Act to allow U.S. military personnel to assist in the war on drugs to include providing assistance to local and federal law enforcement in reducing drug trafficking on military installations.¹⁰⁶
- Under recent legislation, the Secretary of Defense has been authorized by Congress to make available any military equipment and personnel necessary for operation of said equipment for law.¹⁰⁷

Taking the above into consideration, many military law enforcement officers work hand in hand with their state, local, or federal partners. Despite the misconceptions of the Posse Comitatus Act, military and civilian law enforcement work together in a number of diverse activities. This is especially true in crisis response situations or on specially targeted criminal activities such as drugs or terrorism.

According to the FBI, there are 104 Joint Terrorism Task Forces (JTTF) throughout the United States, which are coordinated through the National Joint Terrorism Task Force (NJTTF).¹⁰⁸ Included in these task forces, at both the local and national level, are members of

the U.S. military.¹⁰⁹ One important component of the NJTTF is the Military Operations Support Team which includes military and domestic law enforcement entities dedicated to identifying and preventing military specific terrorism threats. The inclusion of military law enforcement officers on both the NJTTF and JTTFs, around the United States, help to demonstrate another of the many relationships between the civilian and military law enforcement communities.

EVALUATION CRITERIA FOR A MILITARY LAW ENFORCEMENT HANDGUN

As has been demonstrated, military law enforcement and civilian law enforcement have many characteristics in common, making their handgun needs similarly unique. These similarities are routinely reflected in their training courses, ballistic requirements, and joint working relationships. It has been further demonstrated that, regardless of the caliber of ammunition, expanding bullets are as much a necessity for military law enforcement as they are for civilian law enforcement. Training and equipment must be provided to law enforcement to thwart confrontations occurring at close range with ammunition designed to stop a target, not simply penetrate through it.

Additionally, despite the existence and misconceptions related to the Posse Comitatus Act, many military law enforcement officers work hand in hand with their civilian law enforcement partners. Whether at the local, state or national level, during times of emergency or on task forces targeting terrorism or criminal activity, these military law enforcement officers need a handgun that is consistent in function, easy to conceal, and just as capable as that of their civilian counterparts.

For these reasons, the military law enforcement community should model their handgun after that of civilian law enforcement and not participate in the MHS competition. While both the military and the FBI have recently solicited bids for a new handgun, the criteria defined by the FBI's solicitation is more consistent with the needs of the military law enforcement officer than that of the MHS.

Subsequently, the commercially available GLOCK 17, 21, and 22 have all been tested for ballistics, performance, and longevity. For example, BATFE put over 20,000 rounds through the GLOCK 22 before selecting it for their Agents.¹¹⁰ Likewise, the GLOCK 17 and 21 have received this same level of extensive testing by different agencies. Dick Fairburn, a noted firearm expert, author, instructor, and law enforcement officer of over 30 years, argues that all of today's popular commercial handguns have been successfully tested like this for function.¹¹¹ Mr. Fairburn further suggests that agencies should not waste money conducting performance evaluations that have already been exhaustively done by other government agencies or independent firearm laboratories. Instead, agencies looking to purchase a handgun should focus on defining their desired physical characteristics and select a handgun meeting those criteria. With this in mind, the U.S. military should look at the handgun characteristics of civilian law enforcement agencies to build the criteria for military law enforcement.

Review of FBI RFP-OSCU-DSU1503

As one of the largest and most respected law enforcement agency in the federal government, the FBI has been evaluating and testing handguns for its Agents since they began carrying weapons in 1934.¹¹² The results of testing research conducted by the FBI Training Division's Ballistic Testing Center, has long been a catalyst for purchase justification by other

law enforcement agencies. In 2015, the FBI released a Request for Proposal (RFP), RFP-OSCU-DSU1503 (referred to further as FBI-RFP) soliciting handgun manufacturers to bid on a new handgun for their Special Agents. Therefore, FBI-RFP can also assist in building the criteria by which to select the next handgun for military law enforcement.

For a full sized handgun, FBI-RFP requires a barrel length of between 4.26” and 5.20” and a height no larger than 6 inches.¹¹³ This size is consistent with the requirements of law enforcement to both conceal and holster a weapon. Barrel length also plays a role in the shooters ability to hit a target accurately.¹¹⁴ Typically the longer the barrel the more accurate a shot will be.¹¹⁵ Therefore, the indicated barrel size optimizes both the need to carry and conceal while accurately being able to shoot the handgun on target.

Trigger pressure is a second critical criterion by which to select the military law enforcement handgun. The FBI has identified that the trigger pull weight shall be no less than 4.5 lbs. and should not exceed 6 lbs.¹¹⁶ In other words, the pistol must fire before 6 lbs. of pressure is exerted and not before 4.5 lbs. of pressure. This combination allows the officer to keep the handgun from accidentally discharging, while at the same time allowing for a consistent nominal trigger pull at time of purposeful discharge.

According to FBI-RFP, the handgun should contain no external safety, only one designed to disengage with a pull of the trigger.¹¹⁷ This feature represents a major divergence from previous military handgun requirements. While an external safety could prevent the accidental discharge of a weapon, it would more likely lead to the weapon not discharging in time of need. Since research has shown most law enforcement shootings occur at close range during

instantaneous engagements, the existence of an external safety is inappropriate for law enforcement weapons per the FBI-RFP.¹¹⁸

Finally, the last criteria for evaluation is cost. The cost to procure a commercially available GLOCK should fall within the scope of the military's projected budget. While it is impossible to determine the exact cost of a new handgun to the government without engaging in negotiations with the manufacturer, the overall cost to procure an adequate amount of handguns for military law enforcement can be estimated for reasonableness. The last contract for the purchase of Beretta M9s occurred in 2012 with an order for 100,000 of the handguns costing approximately 64 million dollars.¹¹⁹ This would result in a cost estimate of about \$640 per handgun. Additionally, some members of the financial community have estimated the cost of the MHS winner to be in the range of \$750-1250 per unit.¹²⁰ Since it is impossible to know the exact cost per handgun for the MHS competition winner, the criteria will use \$700 as the baseline, which is the approximate average cost between the 2012 M9 contract and financial analyst's predicted low end cost of the MHS handgun competition winner.

COMPARING THE CRITERIA AGAINST GLOCK HANDGUNS

This criteria developed, which takes solely into consideration size, technical features, and cost of a handgun capable of meeting the needs of the military law enforcement officer, can now be evaluated against the commercially available GLOCK 17, 21, and 22. It is therefore possible to utilize Gun-test.com to compare handgun data against the established criteria.¹²¹ Gun-test.com is a subscriber based research firm that provides consumers with impartial data about various firearms. The information contained within their database is a compilation of test results derived from local, state, and federal agencies combined with firearms experts throughout the

country.¹²² Gun-test.com does not accept funding from manufacturers to enable it to provide unbiased assessments of commercial firearms.¹²³ The information provided by Gun-test.com is considered reliable throughout the firearms industry.

Additionally, a limited amount of vendor specific data taken directly from GLOCK is included. This data has been individually sourced for easy identification.

GLOCK 17 9mm Versus Military Law Enforcement Criteria



The GLOCK 17 (Figure 8) has a barrel length of 4.50 inches and an overall height of 5.5 inches.¹²⁴ Additionally, it has a trigger pull of approximately 6 lbs. The GLOCK 17 utilizes safe action technology, which includes a trigger safety mechanism, but no external safety.¹²⁵ The GLOCK 17 9mm has an approximate cost of \$616.¹²⁶ These statistics align favorably with the military law enforcement criteria that has been established, making the commercially available GLOCK 17 9mm a viable option for the military law enforcement community.

GLOCK 21 .45 Auto Versus Military Law Enforcement Criteria



Figure 9 GLOCK 21 .45 ACP

Slightly longer and significantly heavier, the GLOCK 21 .45 ACP (Figure 9) has a barrel length of 4.6 inches and an overall height of 5.2 inches.¹²⁷ Additionally, it has a trigger pull of approximately 5.3 lbs.¹²⁸ The GLOCK 17 utilizes the safe action technology, which includes a trigger safety mechanism, but no external safety.¹²⁹ The GLOCK 21 .45 ACP has an approximate cost of \$668.¹³⁰ These statistics align favorably with the established military law enforcement criteria. While still a viable option for the military law enforcement community, the GLOCK 21 is approximately 4 ounces heavier than the GLOCK 17 and has an increased width of approximately one tenth of an inch.¹³¹

GLOCK 22 40 Caliber Versus Military Law Enforcement Criteria



Figure 10 GLOCK 22 40 caliber

Situated between the size of the GLOCK 17 and a GLOCK 21, the GLOCK 22 40 caliber (Figure 10) has a barrel length of 4.5 inches and an overall height of 5.2 inches.¹³² Additionally, it has a trigger pull of approximately 6 lbs. The GLOCK 22 also utilizes the safe action technology, that includes a trigger safety mechanism, but no external safety.¹³³ The GLOCK 22 40 caliber has an approximate cost of \$648. These statistics align favorably with the military law enforcement criteria. The GLOCK 22 is the primary issued, full-sized handgun for Special Agents of the FBI, the U.S. Marshal Service, Drug Enforcement Agency, and the BATFE.

FINDINGS AND RECOMMENDATIONS

In review, this research brings to light many important factors that should effect the selection of the military's next generation handgun. Based on the age, reliability, and poor satisfaction level of the M9, it is clearly time for the military to upgrade to a newer technology handgun. However, the handgun acquisition strategy of RFP W15QKN-15-R-0002 fails to deliver a handgun that meets the unique needs of the military law enforcement community.

As has been established, this one size fits all handgun procurement strategy does not work across the many job functions of the military. This is especially true when comparing two primary handgun uses, military law enforcement and military members of other job categories when deployed in combat. While each has substantial need for an effective handgun, their training and job functions are markedly different.

Specifically, when examining the handgun training and qualification requirements of military law enforcement officers, the similarities between their needs and those of their civilian counterparts become evident. These similarities indicate a need for a handgun which can be easily drawn from a holster, ready to fire, and discharge ammunition with the capability to eliminate a threat. Since most of the recent shootings at military bases have occurred both domestically and due to active shooter incidents, the handgun must be lightweight, compact, and have a consistent trigger pull, allowing law enforcement officer to accurately engage a target at close range.

Due to the described characteristics of expanding ammunition and its ability to eliminate a target instead of simply wounding it, military law enforcement members should be issued expanding ammunition. While expanding ammunition may violate the essence of both the Hague Convention and NATO Standards, these violations, while debatable even in combat, do not come into effect during traditional law enforcement activities and should not affect the military's purchasing decision.

Therefore, the military should utilize previously accomplished testing by reputable state, local, and federal law enforcement agencies, particularly the Federal Bureau of Investigation, to determine the standards for which a military law enforcement handgun should be qualified.

Since the FBI has also recently published a request for proposals, their identified standards could be easily duplicated, by the U.S. military, and used for the selection of a handgun for military law enforcement personnel.

In this case, the evaluation criteria of size, trigger pressure, safety mechanism and cost were examined. In all three GLOCK handguns, the evaluation criteria were acceptable. Since these handguns are used as the primary service weapons for a majority of law enforcement, the need to test their ballistic capability and reliability is unnecessary being that they have already been proven in both areas repeatedly. By selecting one of these weapons, with a non negotiated price point in the range of \$616-670, the military would likely save millions of dollars making this a win-win situation for not only military professionals, but the American public.

While any of the evaluated GLOCK handguns satisfy the identified selection criteria established for the military law enforcement community, the GLOCK 17 provides the best option. The GLOCK 17 not only meets the size, trigger pull, and safety requirements, it also has the lowest baseline price of the evaluated handguns. More importantly, the GLOCK 17 utilizes a 9mm ammunition round allowing the military to continue its tradition of adherence to NATO Standard 4090.

CONCLUSION

In conclusion, the military could utilize previously conducted testing by civilian law enforcement organizations to justify its handgun of choice for the military law enforcement community. Like their civilian counterparts, the military law enforcement officer, regardless of whether they are part of the Air Force Security Forces, Navy Master-at-Arms, or Army Military

Police, needs a weapon that is capable of protecting the military and civilian citizens they serve. While any of the popular GLOCK handguns would meet this requirement, the GLOCK 17 is the best option. Continuing on the current path of RFP W15QKN-15-R-0002 will yield a weapon designed for combat, and not law enforcement, ultimately yielding these professionals with the incorrect handgun. The U.S. military should avoid making the same mistake it made twenty-five years ago, when it selected the M9, and instead purchase the right handgun for all military law enforcement personnel.



NOTES

¹ "Gun Timeline." PBS. <http://www.pbs.org/opb/historydetectives/technique/gun-timeline>.

² USA. Department of Labor. Bureau of Labor Statistics. *Military Careers*. Washington DC: Office of Occupational Statistics and Employment Projections, 2015.

³ "Discovering the Weapons Used in Basic." Military.com. Accessed January 20, 2016. <http://www.military.com/join-armed-forces/discovering-the-weapons-used-in-basic.html>.

⁴ Eger, Chris. "SIGS in the US Military - Guns.com." Guns.com. January 17, 2013. Accessed November 21, 2015. <http://www.guns.com/2013/01/17/sigs-in-the-us-military/>.

⁵ USA. General Accounting Office. National Security and International Affairs Division. *PROCUREMENT Responses to Questions Posed by Beretta on the M9 Handgun*. Washington DC: GAO, 1989.

⁶ Cox, Mathew. "Army Begins MHS Competition to Find New Pistol and Ammo Supplier." Military.com. September 2, 2015. Accessed November 21, 2015. <http://www.military.com/daily-news/2015/09/02/army-begins-mhs-competition-to-find-new-pistol-and-ammo-supplier.html>.

⁷ "GLOCK Pistols for Law Enforcement." GLOCK Police and Law Enforcement Firearms. Accessed November 13, 2015. <https://us.GLOCK.com/products/sector/law-enforcement>.

⁸ "Why Own a Gun? Protection Is Now Top Reason." Pew Research Center for the People and the Press RSS. March 12, 2013. Accessed January 16, 2016. <http://www.people-press.org/2013/03/12/why-own-a-gun-protection-is-now-top-reason/>.

⁹ Bacon, Lance. "Pistols with a Shot at Replacing the M9." Army Times. Accessed January 2, 2016. <http://archive.armytimes.com/article/20110828/NEWS/108280315/Pistols-with-a-shot-at-replacing-the-M9>.

¹⁰ Mihelek, Donald J. "3 Glocks Used by Agencies in the U.S. Department of Justice - Page 2 of 4." Tactical Life Gun Magazine Gun News and Gun Reviews. May 16, 2014. Accessed January 19, 2016. <http://www.tactical-life.com/firearms/departments-of-justice-glocks/2/#glock-27-gen4-1>.

¹¹ Cole, David. *Survey of U.S. Army Uniforms, Weapons and Accoutrements*. Fort Sam Houston, Texas: U.S. Army, 2007. Print. 124.

¹² "Beretta 90-Two Type F 9mm." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed February 16, 2016. http://www.gun-tests.com/gunreport_detail/9298.html.

¹³ GAO report, Pistol Procurement, Allegations on Army Selection of Beretta 9mm as DOD Standard Sidearm, June 1986.

¹⁴ Ibid.

¹⁵ Cole, David. *Survey of U.S. Army Uniforms, Weapons and Accoutrements*. Fort Sam Houston, Texas: U.S. Army, 2007. Print. pg. 124

¹⁶ Ibid.124.

¹⁷ "M-1911 Pistol History." M-1911 Pistol History. Accessed January 16, 2016. <http://www.m1911.org/history.htm>.

¹⁸ Cole, 125.

¹⁹ Cole, pg. 124.

²⁰ GAO Report, 1986, 17.

²¹ GAO Report, 1986, 18.

²² "Beretta M9 Pistol." Military.com. Accessed January 16, 2016. <http://www.military.com/equipment/m9-pistol>.

²³ Ibid.

²⁴ Russell, Sara M. *Soldier Perspectives on Small Arms in Combat*. Tech. no. CRM D0015259.A2. Alexandria, VA: CNA, 2006. Print.

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid, 12.

²⁸ Ibid, 13.

²⁹ Ibid.

³⁰ Ibid, 20.

³¹ Ibid.

³² Ibid.

³³ Ibid, 2.

³⁴ Cox, Mathew. "Army Begins MHS Competition to Find New Pistol and Ammo Supplier." Military.com. September 2, 2015. Accessed January 18, 2016. <http://www.military.com/daily-news/2015/09/02/army-begins-mhs-competition-to-find-new-pistol-and-ammo-supplier.html>.

³⁵ Ibid.

³⁶ Department of the Army. Army Contracting Command. "10--Notice Type: Modular Handgun System - Special Notice to Post DRAFT RFP Solicitation Number: W15QKN15R0002." News release, January 1, 2016. FedBizOpps.Gov. Accessed January 18, 2016. <https://www.fbo.gov/index?s=opportunity&mode=form&tab=core&id=8ff37255372781aeaf64d55c90753129>.

³⁷ Cox, 2015.

³⁸ Office of Senator John McCain. "America's Most Wasted: Indefensible, America's Costly Misfire." News release, October 29, 2015. John McCain: U.S. Senator Arizona. Accessed January 18, 2016. http://www.mccain.senate.gov/public/_cache/files/4da24065-3e0e-4f8a-ba7f-c74d168dabeb/americas-most-wasted--the-army-s-costly-misfire.pdf.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ USA. Department of Labor. Bureau of Labor Statistics. *Military Careers*. Washington DC: Office of Occupational Statistics and Employment Projections, 2015.

⁴² Ibid.

⁴³ Ibid.

-
- ⁴⁴ USA. Congressional Research Services. Library of Congress. *Reserve Component Personnel Issues: Questions and Answers*. By Lawrence Knapp and Barbara S. Torreon. RL30802. Washington DC: CRS, 2014.
- ⁴⁵ USA. Department of Justice. Office of Justice Programs. *Census of State and Local Law Enforcement Agencies, 2008*. By Brian A. Reaves, Ph.D. NCJ 233982. Washington DC: Bureau of Justice Statistics, 2011.
- ⁴⁶ USA. Department of Justice. Office of Justice Programs. *Federal Law Enforcement Officers, 2008*. By Brian A. Reaves, Ph.D. NCJ 238250. Washington DC: Bureau of Justice Statistics, 2012.
- ⁴⁷ Sadowski, Robert A. "The Most Popular Pistols Used by IDPA Shooters." Gun News Gun Reviews Gun Magazine Personal Defense World. 2014. Accessed January 18, 2016.
<http://www.personaldefenseworld.com/2014/09/popular-pistols-used-idpa-shooters/#idpa-top-guns-2>.
- ⁴⁸ "GLOCK Pistols for Law Enforcement." GLOCK Police and Law Enforcement Firearms. Accessed November 13, 2015. <https://us.GLOCK.com/products/sector/law-enforcement>.
- ⁴⁹ Eger, Chris. "SIGS in the US Military - Guns.com." Guns.com. January 17, 2013. Accessed November 21, 2015.
<http://www.guns.com/2013/01/17/sigs-in-the-us-military/>.
- ⁵⁰ Thompson, Leroy. "About the Military's Compact Pistol – the SIG Sauer M11 – Gun World." ABOUT THE MILITARY'S COMPACT PISTOL – THE SIG SAUER M11. June 28, 2013. Accessed January 18, 2016.
<http://www.gunworld.com/about-militarys-compact-pistol-sig-sauer-m11/>.
- ⁵¹ Ibid.
- ⁵² Rogoway, Tyler. "The Navy SEALs Might Have Selected A New Pistol Of Choice." Foxtrot Alpha. December 26, 2015. Accessed January 18, 2016. <http://foxtrotalpha.jalopnik.com/the-navy-seals-may-have-selected-a-new-pistol-of-choice-1749620057>.
- ⁵³ Ibid.
- ⁵⁴ USA. Department of the Army. Secretary of the Army. *Combat Training with Pistols, M9 and M11*. C3 ed. Vol. FM 3-23.35. Washington DC: n.p., 2008. Print.
- ⁵⁵ Ibid. A-2.
- ⁵⁶ Ibid.
- ⁵⁷ Ibid.
- ⁵⁸ Ibid.
- ⁵⁹ Ibid.
- ⁶⁰ Ibid. A-2.
- ⁶¹ Ibid,1-10.
- ⁶² Ibid.
- ⁶³ USA. Department of the Army. Headquarters US Army. *Military Police, Law and Order Operations*. FM 19-10. Washington DC, 1987.
- ⁶⁴ Ibid. 211.
- ⁶⁵ Ibid.

⁶⁶ Ibid.

⁶⁷ Johnson, Kevin. "FBI Focuses Firearms Training on Close-quarters Combat." *USA Today* (McLean), January 7, 2013, News sec.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Ibid.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ "FBI QUALIFICATION OF FIRE COURSE." National Organization of Security and Safety Management, Inc. Accessed January 16, 2015. <http://www.nocssm.org/fbi-qualification-course-of-fire>.

⁷⁵ Ibid.

⁷⁶ USA. Wisconsin Department of Justice. Office of the Attorney General. *Handgun Qualification Standard Wisconsin Law Enforcement Academies, Agencies, and Retirees*. n.p., 2014. Print.

⁷⁷ Ibid, 13.

⁷⁸ Ibid.

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Ibid, 8.

⁸² Ibid.

⁸³ Ibid, 44.

⁸⁴ Belgium. North Atlantic Treaty Organization. Military Agency for Standardization. *STANAG 4090 LAND - Small Arms Ammunition*. 2nd ed. Brussels: NATO, 1997.

⁸⁵ Ibid.

⁸⁶ USA. Department of Justice. Office of Justice Programs. *Law Enforcement Management and Administrative Statistics, 2000: Data for Individual State and Local Agencies with 100 or More Officers*. By Brian A. Reaves, Ph.D. and Mathew J. Hickman. NCJ 203350. Washington DC: Bureau of Justice Statistics, 2004.

⁸⁷ Ibid.

⁸⁸ "The Avalon Project : Laws of War - Declaration on the Use of Bullets Which Expand or Flatten Easily in the Human Body; July 29, 1899." The Avalon Project : Laws of War - Declaration on the Use of Bullets Which Expand or Flatten Easily in the Human Body; July 29, 1899. Accessed January 18, 2016. http://avalon.law.yale.edu/19th_century/dec99-03.asp.

⁸⁹ Expanding ammunition is defined as a bullets which expands or flattens easily in the human body.

⁹⁰ Jahner, Kyle. "Army to Consider Hollow Point Bullets for New Pistol." Army Times. January 10, 2015. <http://www.armytimes.com/story/military/tech/2015/07/09/handgun-system-solicitation-hollowpoint/29886907/>.

⁹¹ Ibid.

⁹² Ibid.

⁹³ Ibid.

⁹⁴ "Hollow-point Bullets OK'd for Post Police." U.S. Army Ranger Association. May 17, 2010. <http://www.ranger.org/page-581071/344787>.

⁹⁵ Ibid.

⁹⁶ "A Byte Out of History: Fatal Firefight in Miami." FBI. April 11, 2011. Accessed January 18, 2016. https://www.fbi.gov/news/stories/2011/april/miami_041111.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ Berr, Joshua F. *HOLLOW POINT BULLETS: HOW HISTORY HAS HIJACKED THEIR USE IN COMBAT AND WHY IT IS TIME TO REEXAMINE THE 1899 HAGUE DECLARATION CONCERNING EXPANDING BULLETS*. Military Law Review. Military Law Review - Volume 206 - Winter 2010. Accessed January 18, 2016.

¹⁰⁰ Ibid.

¹⁰¹ "Hollow-point Bullets OK'd for Post Police."

¹⁰² Ibid.

¹⁰³ Larson, Eric V. and John E. Peters. Preparing the U.S. Army for Homeland Security: Concepts, Issues, and Options. Santa Monica, CA: RAND Corporation, 2001. http://www.rand.org/pubs/monograph_reports/MR1251.html. pg. 243.

¹⁰⁴ Ibid.244.

¹⁰⁵ Ibid.

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

¹⁰⁸ "National Joint Terrorism Task Force." FBI. 2014. Accessed January 18, 2016. <https://www.fbi.gov/about-us/investigate/terrorism/national-joint-terrorism-task-force>.

¹⁰⁹ Ibid.

¹¹⁰ Mihelek, 2.

¹¹¹ Fairburn, Richard. "Examining the Value of Departmental Weapons Testing and Evaluation." PoliceOne. March 14, 2008. Accessed January 18, 2016. <https://www.policeone.com/police-products/firearms/articles/1665813-Examining-the-value-of-departmental-weapons-testing-and-evaluation/>.

¹¹² Vanderpool, Bill. "A History of FBI Handguns." American Rifleman. August 22, 2011. Accessed January 18, 2016. <http://www.americanrifleman.org/articles/2011/8/22/a-history-of-fbi-handguns/>.

¹¹³ USA. Department of Justice. Federal Bureau of Investigation. *REQUEST FOR PROPOSAL RFP-OSCU-DSU1503*. Quantico: pg.5. 2015. Print.

¹¹⁴ Ayoob, Massad. "How Long Should Your Gun's Barrel Length Be?" Backwoods Home Magazine. July/August 2012. Accessed February 15, 2016. <http://www.backwoodshome.com/how-long-should-your-guns-barrel-length-be/>.

¹¹⁵ Ibid.

¹¹⁶ USA. Department of Justice. Federal Bureau of Investigation. *REQUEST FOR PROPOSAL RFP-OSCU-DSU1503*. Quantico: pg.12.. 2015. Print.

¹¹⁷ USA. Department of Justice. Federal Bureau of Investigation. *REQUEST FOR PROPOSAL RFP-OSCU-DSU1503*. Quantico: n.p., 2015. Print.

¹¹⁸ Ibid.

¹¹⁹ "2012-2017: US Army Orders up to 100,000 M9 Pistols." Defense Industry Daily RSS News. September 20, 2012. Accessed January 18, 2016. <http://www.defenseindustrydaily.com/2012-2017-US-Army-Orders-up-to-100000-M9-Pistols-07540/>.

¹²⁰ Smith, Rich. "The Army's M9 Beretta Replacement Will Cost Twice as Much as We Thought -- The Motley Fool." The Motley Fool. December 12, 2015. Accessed January 18, 2016. <http://www.fool.com/investing/general/2015/12/12/the-armys-m9-beretta-replacement-will-cost-twice-a.aspx>.

¹²¹ "About Us - Gun Tests." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed January 18, 2016. <http://www.gun-tests.com/about/>.

¹²² Ibid.

¹²³ Ibid.

¹²⁴ "GLOCK 17 9mm." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed January 18, 2016. http://www.gun-tests.com/gunreport_detail/8730.html.

¹²⁵ "Full Line of Pistols." Full Line of Pistols. Accessed January 18, 2016. <https://us.GLOCK.com/products/all>.

¹²⁶ Gun-Test. 2016.

¹²⁷ "GLOCK Model 21 .45 ACP." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed January 18, 2016. http://www.gun-tests.com/gunreport_detail/8880.html.

¹²⁸ Gun-Test. 2016.

¹²⁹ Full Line of Pistols." Full Line of Pistols. Accessed January 18, 2016. <https://us.GLOCK.com/products/all>.

¹³⁰ Gun-Test. 2016.

¹³¹ Ibid.

¹³² "GLOCK 22 40 S&W (1298)." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed January 18, 2016. http://www.gun-tests.com/gunreport_detail/8806.html.

¹³³ Full Line of Pistols." Full Line of Pistols. Accessed January 18, 2016. <https://us.GLOCK.com/products/all>.

BIBLIOGRAPHY

"2012-2017: US Army Orders up to 100,000 M9 Pistols." Defense Industry Daily RSS News. September 20, 2012. Accessed January 18, 2016.
<http://www.defenseindustrydaily.com/2012-2017-US-Army-Orders-up-to-100000-M9-Pistols-07540/>.

"About Us - Gun Tests." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed January 18, 2016. <http://www.gun-tests.com/about/>.

"A Byte Out of History: Fatal Firefight in Miami." FBI. April 11, 2011. Accessed January 18, 2016. https://www.fbi.gov/news/stories/2011/april/miami_041111.

Ayoob, Massad. "How Long Should Your Gun's Barrel Length Be?" Backwoods Home Magazine. July/August 2012. Accessed February 15, 2016.
<http://www.backwoodshome.com/how-long-should-your-guns-barrel-length-be/>.

Bacon, Lance. "Pistols with a Shot at Replacing the M9." Army Times. Accessed January 2, 2016. <http://archive.armytimes.com/article/20110828/NEWS/108280315/Pistols-with-a-shot-at-replacing-the-M9>.

Belgium. North Atlantic Treaty Organization. Military Agency for Standardization. *STANAG 4090 LAND - Small Arms Ammunition*. 2nd ed. Brussels: NATO, 1997.

"Beretta M9 Pistol." Military.com. Accessed January 16, 2016.
<http://www.military.com/equipment/m9-pistol>.

Berr, Joshua F. *HOLLOW POINT BULLETS: HOW HISTORY HAS HIJACKED THEIR USE IN COMBAT AND WHY IT IS TIME TO REEXAMINE THE 1899 HAGUE DECLARATION CONCERNING EXPANDING BULLETS*. Military Law Review. Military Law Review - Volume 206 - Winter 2010. Accessed January 18, 2016.
<https://www.jagcnet.army.mil/DOCLIBS/MILITARYLAWREVIEW.NSF/20a66345129fe3d885256e5b00571830/b5974c05f0a57579852578c70042d25f?OpenDocument>

Cox, Mathew. "Army Begins MHS Competition to Find New Pistol and Ammo Supplier." Military.com. September 2, 2015. Accessed January 18, 2016.
<http://www.military.com/daily-news/2015/09/02/army-begins-mhs-competition-to-find-new-pistol-and-ammo-supplier.html>.

Department of the Army. Army Contracting Command. "10--Notice Type: Modular Handgun System - Special Notice To Post DRAFT RFP Solicitation Number: W15QKN15R0002." News release, January 1, 2016. FedBizOpps.Gov. Accessed January 18, 2016.
<https://www.fbo.gov/index?s=opportunity&mode=form&tab=core&id=8ff37255372781aeaf64d55c90753129>.

- "Discovering the Weapons Used in Basic." Military.com. Accessed January 20, 2016.
<http://www.military.com/join-armed-forces/discovering-the-weapons-used-in-basic.html>.
- Fairburn, Richard. "Examining the Value of Departmental Weapons Testing and Evaluation." PoliceOne. March 14, 2008. Accessed January 18, 2016.
<https://www.policeone.com/police-products/firearms/articles/1665813-Examining-the-value-of-departmental-weapons-testing-and-evaluation/>.
- "FBI QUALIFICATION OF FIRE COURSE." National Organization of Security and Safety Management, Inc. Accessed January 16, 2015. <http://www.nocssm.org/fbi-qualification-course-of-fire>.
- "Full Line of Pistols." Full Line of Pistols. Accessed January 18, 2016.
<https://us.GLOCK.com/products/all>.
- "GLOCK 17 9mm." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed January 18, 2016. http://www.gun-tests.com/gunreport_detail/8730.html.
- "GLOCK 22 40 S&W (1298)." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed January 18, 2016. http://www.gun-tests.com/gunreport_detail/8806.html.
- "GLOCK Model 21 .45 ACP." Gun Tests; The Consumer Resource for the Serious Shooter. Accessed January 18, 2016. http://www.gun-tests.com/gunreport_detail/8880.html.
- "Gun Timeline." PBS. Accessed December 20, 2015.
<http://www.pbs.org/opb/historydetectives/technique/gun-timeline/>.
- "Hollow-point Bullets OK'd for Post Police." U.S. Army Ranger Association. May 17, 2010.
<http://www.ranger.org/page-581071/344787>.
- Jahner, Kyle. "Army to Consider Hollow Point Bullets for New Pistol." Army Times. January 10, 2015. <http://www.armytimes.com/story/military/tech/2015/07/09/handgun-system-solicitation-hollowpoint/29886907/>.
- Johnson, Kevin. "FBI Focuses Firearms Training on Close-quarters Combat." *USA Today* (McLean), January 7, 2013, News sec.
- Larson, Eric V. and John E. Peters. Preparing the U.S. Army for Homeland Security: Concepts, Issues, and Options. Santa Monica, CA: RAND Corporation, 2001.
http://www.rand.org/pubs/monograph_reports/MR1251.html. Also available in print form.
- "M-1911 Pistol History." M-1911 Pistol History. Accessed January 16, 2016.
<http://www.m1911.org/history.htm>.

- Mihelek, Donald J. "3 Glockes Used by Agencies in the U.S. Department of Justice - Page 2 of 4." *Tactical Life Gun Magazine Gun News and Gun Reviews*. May 16, 2014. Accessed January 19, 2016. <http://www.tactical-life.com/firearms/departments-of-justice-glocks/2/#glock-27-gen4-1>.
- Office of Senator John McCain. "America's Most Wasted: Indefensible, America's Costly Misfire." News release, October 29, 2015. John McCain: U.S. Senator Arizona. Accessed January 18, 2016. http://www.mccain.senate.gov/public/_cache/files/4da24065-3e0e-4f8a-ba7f-c74d168dabeb/americas-most-wasted---the-army-s-costly-misfire.pdf.
- Rogoway, Tyler. "The Navy SEALs Might Have Selected A New Pistol Of Choice." *Foxtrot Alpha*. December 26, 2015. Accessed January 18, 2016. <http://foxtrotalpha.jalopnik.com/the-navy-seals-may-have-selected-a-new-pistol-of-choice-1749620057>.
- Russell, Sara M. *Soldier Perspectives on Small Arms in Combat*. Tech. no. CRM D0015259.A2. Alexandria, VA: CNA, 2006. Print.
- Sadowski, Robert A. "The Most Popular Pistols Used by IDPA Shooters." *Gun News Gun Reviews Gun Magazine Personal Defense World*. 2014. Accessed January 18, 2016. <http://www.personaldefenseworld.com/2014/09/popular-pistols-used-idpa-shooters/#idpa-top-guns-2>.
- Small Arms in Combat*. Tech. no. CRM D0015259.A2. Alexandria, VA: CNA, 2006. Print.
- "The Avalon Project: Laws of War - Declaration on the Use of Bullets Which Expand or Flatten Easily in the Human Body; July 29, 1899." *The Avalon Project: Laws of War - Declaration on the Use of Bullets Which Expand or Flatten Easily in the Human Body*; July 29, 1899. Accessed January 18, 2016. http://avalon.law.yale.edu/19th_century/dec99-03.asp.
- Thompson, Leroy. "About the Military's Compact Pistol – the SIG Sauer M11 – Gun World." *ABOUT THE MILITARY'S COMPACT PISTOL – THE SIG SAUER M11*. June 28, 2013. Accessed January 18, 2016. <http://www.gunworld.com/about-militarys-compact-pistol-sig-sauer-m11/>.
- USA. Congressional Research Services. Library of Congress. *Reserve Component Personnel Issues: Questions and Answers*. By Lawrence Knapp and Barbara S. Torreon. RL30802. Washington DC: CRS, 2014.
- USA. Department of Labor. Bureau of Labor Statistics. *Military Careers*. Washington DC: Office of Occupational Statistics and Employment Projections, 2015.
- USA. Department of Justice. Federal Bureau of Investigation. *REQUEST FOR PROPOSAL RFP-OSCU-DSU1503*. Quantico: n.p., 2015. Print.

- USA. Department of Justice. Office of Justice Programs. *Census of State and Local Law Enforcement Agencies, 2008*. By Brian A. Reaves, Ph.D. NCJ 233982. Washington DC: Bureau of Justice Statistics, 2011.
- USA. Department of Justice. Office of Justice Programs. *Federal Law Enforcement Officers, 2008*. By Brian A. Reaves, Ph.D. NCJ 238250. Washington DC: Bureau of Justice Statistics, 2012.
- USA. Department of Justice. Office of Justice Programs. *Law Enforcement Management and Administrative Statistics, 2000: Data for Individual State and Local Agencies with 100 or More Officers*. By Brian A. Reaves, Ph.D. and Mathew J. Hickman. NCJ 203350. Washington DC: Bureau of Justice Statistics, 2004.
- USA. Department of the Army. ARMY CONTRACTING COMMAND - NJ. *SOLICITATION, OFFER AND AWARD - W15QKN-15-R-0002*. By Vincent Frank Turco. PICATINNY ARSENAL: Department of the Army, 2015. Print.
- USA. Department of the Army. Headquarters US Army. *Military Police, Law and Order Operations*. FM 19-10. Washington DC, 1987.
- USA. Department of the Army. Secretary of the Army. *Combat Training with Pistols, M9 and M11*. C3 ed. Vol. FM 3-23.35. Washington DC: n.p., 2008. Print.
- USA. General Accounting Office. Comptroller General of the United States. *Protest of FBI Solicitation for Semiautomatic Pistols - B-236614*. Washington DC: GAO, 1989. Print.
- USA. General Accounting Office. National Security and International Affairs Division. *PROCUREMENT Responses to Questions Posed by Beretta on the M9 Handgun*. Washington DC: GAO, 1989. Print. B-222372.
- USA. Wisconsin Department of Justice. Office of the Attorney General. *Handgun Qualification Standard Wisconsin Law Enforcement Academies, Agencies, and Retirees*. N.p.: n.p., 2014. Print.
- Vanderpool, Bill. "A History of FBI Handguns." *American Rifleman*. August 22, 2011. Accessed January 18, 2016. <http://www.americanrifleman.org/articles/2011/8/22/a-history-of-fbi-handguns/>.
- "Why Own a Gun? Protection Is Now Top Reason." *Pew Research Center for the People and the Press RSS*. March 12, 2013. Accessed January 16, 2016. <http://www.people-press.org/2013/03/12/why-own-a-gun-protection-is-now-top-reason/>.